

Map & Photo Legend



Shoestring Cove viewed from the east.



EX-04a viewed from the east.



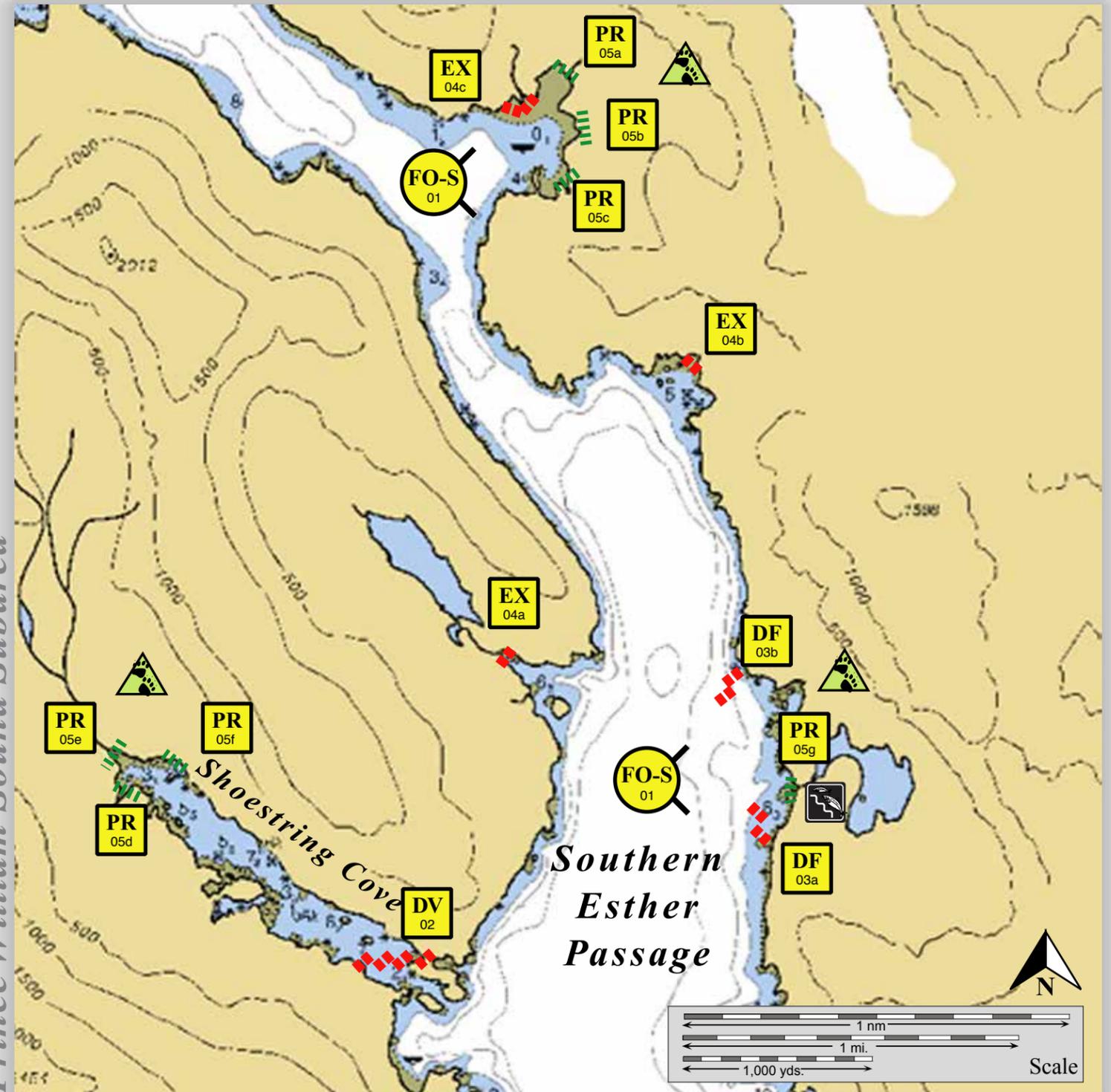
Fish Ladder site viewed from the northeast.

-  Free-oil Containment and Recovery, Shallow Water
-  Exclusion Booming
-  Deflection Booming
-  Diversion Booming
-  Passive Recovery
-  Protected-water Boom
-  Snare or Sorbent Boom
-  Fish Ladder
-  Bears in Area, Guards Recommended

Geographic Response Strategies for Prince William Sound Subarea

South Esther Passage, PWS-NW-21

Center of map at 60° 49.66' N Lat., 147° 53.83' W Lon.



This is not intended for navigational use.

Soundings in fathoms

ID	Location and Description	Response Strategy	Implementation	Response Resources	Staging Area	Site Access	Resources Protected (months)	Special Considerations
PWS NW-21-01 	Southern Esther Passage Nearshore waters in the general area of: Lat. 60°49.66'N Lon. 147°53.83'W	Free-oil Recovery Maximize free-oil recovery in the offshore & nearshore environment of Southern Esther Passage depending on spill location and trajectory.	Deploy free-oil recovery strike teams upwind and up current of Southern Esther Passage. Use aerial surveillance to locate incoming slicks.	Deploy multiple free-oil recovery strike teams as required to maximize interception of oil before it impacts sensitive areas.	Whittier	Via marine waters Chart 16711-1	Same as NW-21-02	Vessel master should have local knowledge. Use extreme caution, shoal waters with numerous reefs and rocks.
PWS NW-21-02 	Southern Esther Passage a. Lat. 60°51.78'N Lon. 147°54.58'W b. Lat. 60°52.30'N Lon. 147°54.80'W	Deflection Deflect oil coming from main channel away from the fish ladder and intertidal area and back into the channel for free-oil recovery.	Deploy 4x 300 ft. boom and anchor system with skiffs (class 6). Position 2 booms for each array in the indicated places and at a proper angle to deflect oil back out in the channel. Tend throughout the tide.	Deployment Equipment 1200 ft. protected-water boom 10 ea. medium anchor systems Vessels 1 ea. class 3 2 ea. class 6 Personnel/Shift 7 ea. vessel crew/general techs 2 ea. skilled techs Tending Vessels 1 ea. class 3 1 ea. class 6 Personnel/Shift 3 ea. vessel crew/general techs	Vessel platform	Via marine waters Chart 16711-1	Fish- intertidal spawning-salmon (May-Sept.) Birds-waterfowl concentration Marine mammals- seals, otters Habitat- marsh, sheltered rocky shoreline	Vessel master should have local knowledge. Site surveyed: 6/5/09 PWS GRS Tactics Committee. Tested: not yet
PWS NW-21-03 	Shoestring Cove Lat. 60°51.26'N Lon. 147°57.23'W	Divert and Collect Divert oil to the shoreside recovery location.	Deploy anchors and boom with skiffs (class 6). Place 6 x 300 ft. sections of protected-water boom in cascaded fashion to divert incoming oil to the shoreside recovery site. Set up recovery site and tend throughout the tide.	Deployment Equipment 1800 ft. protected-water boom 18 ea. anchor systems 4 ea. anchor stakes 1 ea. shoreside recovery system Vessels/Personnel/Shift Same as NW-21-02 Tending Vessels/Personnel/Shift Same as NW-21-02	Vessel platform	Via marine waters Chart 16711-1	Same as NW-21-02	Vessel master should have local knowledge. Bears are present during salmon runs. A bear guard is required. Tested: not yet
PWS NW-21-04 	Southern Esther Passage a. Lat. 60°52.37'N Lon. 147°56.49'W b. Lat. 60°53.39'N Lon. 147°55.16'W c. Lat. 60°54.30'N Lon. 147°56.34'W	Exclusion Exclude oil from impacting the identified streams in Southern Esther Passage.	Deploy anchors and boom with skiffs (class 6) at high tide. Place protected-water boom across the indicated intertidal areas and stream openings. For array (c) place the boom in a chevron pattern. Tend throughout the tide.	Deployment Equipment 1400 ft. protected-water boom 7 ea. anchor systems 12 ea. anchor stakes Vessels/Personnel/Shift Same as NW-21-02 Tending Vessels/Personnel/Shift Same as NW-21-02	Vessel platform	Via marine waters Chart 16711-1	Same as NW-21-02	Vessel master should have local knowledge. Title 16 Fish Habitat Permit required from ADF&G. Bears are present during salmon runs. A bear guard is required. Tested: not yet
PWS NW-21-05 	Southern Esther Passage a. Lat. 60°54.34'N Lon. 147°56.13'W b. Lat. 60°54.19'N Lon. 147°56.00'W c. Lat. 60°54.01'N Lon. 147°56.08'W d. Lat. 60°51.89'N Lon. 147°59.18'W e. Lat. 60°52.01'N Lon. 147°59.18'W f. Lat. 60°52.01'N Lon. 147°58.81'W g. Lat. 60°51.92'N Lon. 147°54.44'W	Passive Recovery Place passive recovery across the mouths of the designated salmon streams.	Approach the identified streams and intertidal areas on rising tide. Place and anchor snare or sorbent boom across the mouths of the designated salmon streams and intertidal areas. Replace as necessary to maximize the recovery. <u>Boom Lengths:</u> a. 200 ft. b. 200 ft. c. 300 ft. d. 200 ft. e. 200 ft. f. 100 ft. g. 300 ft.	Deployment Equipment 1500 ft. snare or sorbent boom 7 ea. anchor systems 15 ea. anchor stakes Vessels/Personnel/Shift Same as NW-21-02 Tending Vessels/Personnel/Shift Same as NW-21-02	Vessel platform	Via marine waters Chart 16711-1	Same as NW-21-02	Use snare boom for persistent oils and sorbent boom for non-persistent oils. Bears are present during salmon runs. A bear guard is required.